

hoc dataset was also the source of the background patient characteristics. Costs and benefits were discounted at 5% and assessed from the Canadian perspective. Sensitivity analyses were performed. **RESULTS:** Both CANA 100 and 300 mg were dominant compared to SAXA 5 mg (lower net cost and greater quality-adjusted life-years [QALYs]). CANA 100 and 300 mg reduced costs (−\$375 and −\$771, respectively) and improved QALYs (0.033 and 0.057, respectively) over 40 years. Sensitivity analyses support these findings. **CONCLUSIONS:** These results suggest that using CANA in older individuals is cost-effective versus SAXA in Canada.

PDB59

EVALUATING THE COST OF BRINGING PEOPLE WITH TYPE 2 DIABETES MELLITUS TO MULTIPLE TARGETS OF TREATMENT IN CANADA

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OBJECTIVES: The key challenges in the successful treatment of type 2 diabetes include maintaining tight glycemic control, minimizing the risk of hypoglycemia, controlling cardiovascular risk factors, and controlling body weight. The aim of the present analysis was to evaluate the cost per patient achieving a composite clinical endpoint (HbA1c < 7%, with no weight gain and no hypoglycemic events) in patients with type 2 diabetes in Canada receiving liraglutide 1.2 mg, liraglutide 1.8 mg, thiazolidinedione, sulfonylurea, insulin glargine, sitagliptin or exenatide. **METHODS:** The proportion of patients achieving control was taken from a meta-analysis of the phase 3 trial program of liraglutide. Treatment costs were estimated from a health-care payer perspective. Cost-effectiveness in terms of cost per patient achieving the composite endpoint (cost of control) was evaluated with an economic model developed in Microsoft Excel. No discounting was applied to cost or clinical outcomes as these were not projected beyond a 1-year time horizon. Sensitivity analyses were performed. **RESULTS:** Liraglutide 1.8 mg was associated with the lowest number needed to treat to bring one patient to the composite endpoint. Evaluation of only annual pharmacy costs indicated that was associated with the lowest direct annual costs. Combining the clinical efficacy data with the annual cost of medications produced cost of control values of CAD 6,070 (liraglutide 1.2 mg), CAD 6,949 (liraglutide 1.8 mg), CAD 7,237 (glimepiride), CAD 7,704 (exenatide), CAD 8,297 (insulin glargine), CAD 8,741 (pioglitazone) and CAD 9,270 (sitagliptin) per patient achieving the composite endpoint. **CONCLUSIONS:** Liraglutide 1.2 mg and 1.8 mg were associated with the lowest cost of control values, driven by the high proportion of patients achieving the composite endpoint. A relatively low cost of control value was achieved for glimepiride, driven by low acquisition costs, despite relatively few patients achieving the composite endpoint.

PDB60

COST EFFECTIVENESS ANALYSIS OF DPP4 INHIBITORS

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OBJECTIVES: We determined based on the acquisition cost of the different DPP4 inhibitors (IDDP4) in Mexico, the cost of daily treatment and performed a cost effectiveness analysis having the percentage of patients with a HbA1c level less than 7% calculating the number needed to treat for each treatment (NNT). **METHODS:** Due that there are no head to head studies between IDPP4 therapies and with the goal of diminish confounding factors, we performed a search of clinical studies controlled with placebo in naïve patients for DPP4 therapies available in Mexico (linagliptin, saxagliptin, vildagliptin and sitagliptin) five studies were included. According to the American Association for the Diabetes 2011, the endpoint was determined as control if the patient had a HbA1c less than 7 mg/dL. The follow up time was 24 weeks. NNT was calculated for each therapy, in the case of vildagliptin where two studies were included, the results were pondered. Using the NNT we calculated the mean cost effectiveness ratio. **RESULTS:** The efficacy measured by the percentage of patients that reach a HbA1c less than 7 range from 25.3% to 42% in the IDPP4 group and from 11.6 to 24% in the placebo group. The NNT calculated for each IDPP4 are: sitagliptin 4.17, vildagliptin 5.48, saxagliptin 7.14 and linagliptin 7.35. The cost effectiveness for sitagliptin was 6,885 pesos, vildagliptin 8,503.07 pesos, saxagliptin 11,475 pesos and linagliptin 11,891.04 pesos. **CONCLUSIONS:** Sitagliptin has the less NNT of all IDPP4, so it may make a more efficient resource ascription. The mean cost effectiveness ratio help us to interpret the real cost of the treatment analyzed with the same effectiveness measure.

PDB61

PHARMACOECONOMIC EVALUATION OF GLP-1 RECEPTORS AGONIST VERSUS DPP-4 INHIBITORS IN PATIENTS WITH TYPE 2 DIABETES: A SYSTEMATIC REVIEW

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OBJECTIVES: To evaluate the pharmacoeconomic outcome of GLP-1 receptors agonist vs. DPP-4 inhibitors in patients with type 2 diabetes. **METHODS:** A systematic literature search of pharmacoeconomic studies on GLP-1 receptors agonist vs. DPP-4 inhibitor was carried out in following databases: PubMed, Embase, Cochrane Library, and Chinese Knowledge Infrastructure (CNKI) (from the inception to April 2014). Two review authors independently applied the inclusion criteria, assessed trial quality, and extracted the data. The methodological qualities were evaluated by a scale of 26 items which developed based on 3 economic evaluation principles and guidelines (Drummond's, Ramsey's and Papaioannou's), and the data were analyzed using descriptive analysis. **RESULTS:** According to the inclusion and exclusion criteria 6 randomized controlled clinical trials and modeling studies were selected, including 4 studies of liraglutide+ metformin vs. sitagliptin+ metformin, 1 study of exenatide+ metformin vs. sitagliptin + metformin, and 1 study of exenatide vs. sitagliptin. The methodological quality of them were scored 19-24 (total score was 26). There were 5 CUA studies which conducted a long-term simulation ≥ 35 years using CDM model, and 1 short-term CEA study. 4 studies

used ICER and 2 used C/E as outcomes. Liraglutide is more cost-effective than sitagliptin because the ICER of liraglutide vs. sitagliptin is \$25742/QALY in USA, £9851/QALY in England and EUR13266/QALY in Spain. All the reported ICERs were below the implemented country-specific thresholds. The results of 2 studies of exenatide vs. sitagliptin were opposite. **CONCLUSIONS:** Present published literatures showed GLP-1receptor agonist may be more cost-effective than DPP-4 inhibitor. But the conclusions remain to be confirmed further by more high quality studies.

PDB62

DETEMIR IN DIABETES TYPE 2 PATIENTS A COST-UTILITY ANALYSIS, COLOMBIA 2014

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OBJECTIVES: Develop a cost-utility assessment with diabetes mellitus type 2 patients comparing detemir to glargine and NPH insulin in Colombia. **METHODS:** A Markov chain model was adapted to incorporate the quality life measures to the disease events, using the startup of NPH insulin, detemir or glargine to the development of macro and microvascular events or death, in a 5-year time horizon and for a 10,000 patients cohorts, with different levels of glycosylated hemoglobin. By the other hand, quality life data were derived from international research and used as utility measure in each event. Costs were estimated from the 2014 health system transactions values in Colombian pesos. Furthermore, additional parameters as the effectiveness information and hypoglycemic events were updated to 2014. The research included a Monte Carlo model for sensibility analysis and a budget impact analysis. **RESULTS:** Detemir taken at a standard daily dose of 0.10U present less macro and microvascular events compare with other drugs. The QALYs average for detemir harm were 2,60 to 2,54 using glargine and 2,53 using NPH insulin. The final average-cost of detemir was \$ COP 88.720,67 less per patient tan glargine, and \$ COP 75.252,50 less than NPH insulin. Detemir dominance remained through the probabilistic analysis. **CONCLUSIONS:** Under the analyzed conditions detemir would be dominant compare to using NPH or glargine, from the QALYs viewpoint and in a 5-year time horizon.

PDB63

PREVALENCE AND TREATMENT OF GENITOURINARY CONDITIONS AMONG PATIENTS WITH TYPE 2 DIABETES MELLITUS

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OBJECTIVES: To assess the prevalence of and predictors associated with genitourinary (GU) conditions among patients with type 2 diabetes mellitus (T2DM) and to understand the treatment pathways patients employ when these conditions occur. **METHODS:** An internet-based survey was conducted in July 2014. The sample recruited from YouGov PollingPoint Panel in the U.S. included 2,000 adults with T2DM diagnosed by a physician for at least one year and treated with T2DM medications. Participants who reported a GU condition (urinary tract infection [UTI] and/or genital infection [GI] including genital yeast infection, bacterial vaginosis/vaginitis [BV], or balanitis) in the past 12 months were asked to complete survey questions about their GU conditions. Descriptive analysis and logistic regressions were performed. **RESULTS:** 399 participants (20%) experienced at least one GU condition in the past 12 months; 309 (15.5%) reported UTI and 169 (8.5%) reported GI condition. The most common GI condition was yeast infection (n=115, 5.8%). Predictors of GU conditions included: higher HbA1c level (i.e. 8% > HbA1c ≥ 7% vs. < 7%, OR [95% CI] = 1.41 [1.05, 1.90]), female vs. male (2.78 [2.16, 3.58]), and more comorbid conditions (i.e. 1 vs. > 5 comorbid conditions, 0.38 [0.23, 0.64]). Among respondents reporting GU conditions, 82.4% sought professional care. Female vs. male (2.00 [1.08, 3.70]), chronic vs. acute infections (2.83 [1.35, 5.94]), and more comorbid conditions (i.e. 1 vs. > 5 comorbid conditions, 0.14 [0.04, 0.47]) were associated with higher odds of seeking professional care. **CONCLUSIONS:** In this study, 20% of participants with T2DM experienced GU conditions in the past 12 months, among whom 17.6% did not seek professional care. Predictors observed in this study could help physicians and health plans to identify those patients at high risk of GU conditions or those whose condition may potentially advance to professional care to better manage these conditions among the T2DM population.

DIABETES/ENDOCRINE DISORDERS – Patient-Reported Outcomes & Patient Preference Studies

PDB64

IMPACT OF A PHARMACIST TELEPHONE INTERVENTION ON PREVENTING MEDICATION DISCONTINUATION AMONG HYPERTENSIVE PATIENTS WITH DIABETES IN A MEDICARE ADVANTAGE PLAN

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OBJECTIVES: To examine the effect of a pharmacist telephone intervention on preventing medication discontinuation of ACE-Is/ARBs among non-adherent hypertensive patients with diabetes enrolled in a Texas-based Medicare Advantage plan. **METHODS:** The health plan medical claims data was used to identify patients with hypertension and diabetes diagnoses and at least 2 fills for ACE-Is or ARBs between January/2013- October/2013. Patients who failed to refill their medication for more than one day, and had a proportion of days covered (PDC) < 0.8 were considered non-adherent and contacted by a pharmacist by phone. Multivariate logistic regression was conducted to assess the intervention effect on medication discontinuation during the 6 months post-intervention. The outcome variable was a categorical variable of continuing (yes) vs discontinuation (no). Major independent variable